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CONFIDMATION NO

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,316	04/21/2004	Joel R. Studin	SDF 04-14	5671
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Stuart D. Frenkel			SHEIKH, HUMERA N	
Suite 330 3975 University Drive			ART UNIT	PAPER NUMBER
Fairfax, VA 22030			. 1615	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/829,316	STUDIN, JOEL, R.				
Office Action Summary	Examiner	Art Unit				
	Humera N. Sheikh	1615				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>08 Jules</u> 2a)□ This action is FINAL . 2b)⊠ This 3)□ Since this application is in condition for alloward	action is non-final.	osecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) 1-16 and 30-32 is/are pending in the 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-16 and 30-32 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.	,				
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the drawing(s) be held in abeyance. Setion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau	s have been received. s have been received in Application rity documents have been received.	ion No				
* See the attached detailed Office action for a list	of the certified copies not receive	HUMERAN. SHEIKH PAINTER AND EXAMINER TO 1600				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 07/08/2004.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	(PTO-413) ate				

DETAILED ACTION

Status of the Application

Receipt of the Preliminary Amendment filed 04/21/04 and the Information Disclosure Statement (IDS) filed 07/08/04 is acknowledged.

Claims 1-16 and 30-32 are pending in this action. Claims 17-29 and 33-54 have been cancelled. Claims 1-16 and 30-32 are rejected.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16 and 30-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Wands, 8 USPQ2d 1400 (Fed. Cir. 1988). Among these factors are: (1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary.

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When the above factors are weighed, it is the examiner's position that one skilled in the art could not practice the invention without undue experimentation.

(1) The nature of the invention/(5) The breadth of the claims:

The invention is directed to a method of treating healed wounds so as to prevent or reduce scarring and/or improve the appearance of scars comprising: applying onto a healed wound a composition comprising a fluid, film-forming carrier, and subsequently hardening the carrier into a tangible membrane juxtaposed to the healed wound, thereby preventing or reducing scarring or improving the appearance of a scar.

(2) The state of the prior art:

The prior art teachings provide for methods for delivering drugs on human body surfaces, and drug formulations and delivery systems that can be applied to and then peeled off the skin and/or off compromised human body surfaces after the drug delivery is achieved.

(3) The relative skill of those in the art:

The relative skill of those in the art is high.

(4) The predictability or unpredictability of the art:

The unpredictability of the art is high.

(6) The amount of direction or guidance presented:

The specification filed 04/21/05 discloses 'preventing or reducing' scarring by applying a composition comprising a fluid, film-forming carrier, and hardening the carrier into a tangible membrane. While "treating" or "reducing" scarring may be possible by application of the instant composition, it is unclear to the Examiner as to how application of the instant composition can "prevent" scarring. The 'prevention' of scarring would require 'undue' and painstaking experimentation by one of ordinary skill in the art. It is suggested that the term "preventing" in Claims 1 and 30 be deleted.

(7) The presence or absence of working examples:

The working examples are insufficient to establish the method of treating healed wounds to 'prevent' scarring. The examples present "scar-healing" compositions and methods, but do not present "scar-preventing" compositions and methods (See for instance, Example 1 - pg. 24 of Specification).

(8) The quantity of experimentation necessary:

The instant invention provides for a method of treating healed wounds so as to prevent or reduce scarring and/or improve the appearance of scars comprising: applying onto a healed wound a composition comprising a fluid, film-forming carrier, and subsequently hardening the carrier into a tangible membrane juxtaposed to the healed wound, thereby preventing or reducing scarring or improving the appearance of a scar. When the above factors are weighed together, it is the position of the Examiner that the instant invention would require 'undue' and painstaking experimentation to arrive at the instant invention to determine which particular combination of components and process steps would be required for 'reducing' scarring with the "prevention" of scar formation being even less probable. Deletion of the term "preventing" would overcome this rejection.

Double Patenting

Claims 1, 5-16, 30 and 31 of this application conflict with claims 1-17 of Application No. 10/715,183. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1, 5-16, 30 and 31 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-17 of copending Application No. 10/715,183. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-8, 10-16 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang (US Pat. No. 6,528,086 B2).

The instant invention is drawn to a method of treating healed wounds so as to prevent or reduce scarring and/or improve the appearance of scars comprising: applying onto a healed

wound a composition comprising a fluid, film-forming carrier, and subsequently hardening the carrier into a tangible membrane juxtaposed to the healed wound, thereby reducing scarring or improving the appearance thereof.

Zhang ('086) teaches methods and formulations for dermal drug delivery on a human body surface comprising less than solid anesthetic formulations and delivery systems that can be applied to the skin or compromised surfaces and subsequently converted to a soft coherent solid state and then peeled off after the anesthetic effect is achieved (see Abstract); (column 1, lines 9-23). The formulation comprises a topically delivered drug, a conversion agent and a vehicle medium or carrier, wherein the drug is dispersed in the carrier (col. 3, lines 20-22). At the time of application of the formulation to the skin, the formulation is in a less-than-solid phase. At the conclusion of the treatment, the formulation is a coherent, soft solid that can be cleanly peeled from the skin (col. 3, lines 23-29).

The formulation contains active ingredients of topical and local anesthetic agents and systemic circulation and regional tissue drugs of analgesics, hormones and anti-inflammatory agents (col. 14, lines 55-61).

According to Zhang, the topically delivered drug or pharmaceutical can be a single drug, such as a single local anesthetic or a combination of drugs (*i.e.*, eutectic mixture of lidocaine and tetracaine). The drug may be dispersed throughout the formulation in a solid form, dissolved in oil droplets, which are dispersed in the vehicle medium, or in aqueous solution within the vehicle medium. The drug should be capable of transdermal delivery. The vehicle medium facilitates application of the formulation and delivery of the drug. Permeation enhancers may also be added (col. 3, lines 10-58).

The conversion agent provides the formulation with the ability to change from one phase to another more solid and coherent phase, such as from a liquid or cream to a soft solid. The formulation is applied to a patient's skin in such a way as to form a continuous layer of formulation. When the phase change occurs, the solidified formulation is more easily removed from the patient's skin. The formulation does not leave behind residues or films. Zhang teaches that a unique feature of his invention is that the solid phase is coherent and has certain strength so it can be *peeled off* the body surface as a layer, leaving little residual formulation. The formulation will be flexible and not brittle (see col. 3, line 59 – col. 4, line 9).

Zhang teaches the use of polyvinyl alcohol as an ingredient in the cream formulation of his invention (col. 4, lines 22-32).

Cellulose derivatives are disclosed at column 12, lines 13-25).

Various drugs and pharmaceutical agents can be included in the formulation, such as dermatological agents; drugs for promoting wound healing; drugs for treating warts and moles; drugs for treating ulcerated skin; drugs for treating insect bites and minor cuts; anti-inflammatory agents (e.g., corticosteroids); analgesics (narcotic agents, steroids); vitamins; agents for treating necrotic tissues and dermal ulcers used in debridement (e.g. *collagenase*); hormones and the like (col. 11, lines 16 – col. 14, line 64).

Application techniques of the composition are taught at column 18, lines 12-55. Additionally, Zhang teaches that the formulation may be molded or manipulated so that the surface being treated is covered by a substantially even layer of the formulation (col. 5, lines 34-37).

The various Tables and examples demonstrate different applications of the invention. For example, Table A (Formulation I) at column 7, shows a formulation comprising a pharmaceutical agent (eutectic mixture), polyvinyl alcohol, glycerol, lecithin, Water Lock® and water in various percentage weights wherein it states that Formulation I should be easy to apply and remove (i.e., in form of cream, paste) when applied to the skin, but should form a solid gel so that it can be easily 'peeled off' the skin without leaving a mess on the skin. Tables B and onwards demonstrate anesthetic formulations comprising mixtures of anesthetics and ingredients.

Zhang teaches that one of the advantages of his invention is that it obviates the need to remove the cream from the skin by extensive washing or cleansing of the skin. When the desired anesthetic effect is achieved, the solid gel is peeled off the skin area, leaving virtually no residual mess on the skin. The skin area is anesthetized and if desired can be subjected to a medical treatment or procedure (col. 9, line 45 – col. 10, line 9).

Zhang teaches drug formulations and delivery systems that can be applied to and then peeled off the skin and/or off compromised human body surfaces after the drug delivery is achieved. There is no significant distinction observed between the instant method and the methods of the prior art since Zhang explicitly teaches methods of drug delivery comprising active ingredients, such as dermal-treating drugs, particularly, collagenase in combination with fluid carriers and conversion agents wherein the formulation can be cleanly peeled off the skin.

Thus, given the explicit teachings of Zhang delineated above, the instant invention, when taken as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

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Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang (U.S.

Pat. No. 6,528,086 B2) as applied to claims 1-8, 10-16 and 30-32 above and further in view

of Tipton et al. (U.S. Pat. No. 5,632,727).

The teachings of Zhang are discussed above.

Zhang teaches vitamins, such as vitamins A & D (see column 11, lines 32-33). Zhang

does not teach Vitamin E.

Tipton et al. ('727) teach a biodegradable film dressing and methods of using the film

dressing to treat injured tissues and deliver biologically active agents wherein the film comprises

vitamins, such as vitamin E (see reference column 10, lines 17-21).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to incorporate the vitamin E as taught by Tipton et al. within the delivery formulations

of Zhang. One of ordinary skill in the art would be motivated to do so with a reasonable

expectation of success because Tipton et al. explicitly teach that suitable and effective vitamins

that are beneficial in their formulation include vitamin E. The expected result would be an

optimally-enhanced formulation for the treatment of skin conditions.

Prior Art made of record, not relied upon and deemed relevant by the Examiner:

US Patent No. 5,446,070

Mantelle

08/1995

US Patent No. 4,937,078

Mezei et al.

06/1990

Correspondence

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Humera N. Sheikh whose telephone number is (571) 272-0604.

The examiner can normally be reached on Monday through Friday from 8:00A.M. to 5:30P.M.,

alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Woodward, can be reached on (571) 272-8373. The fax phone number for

the organization where this application or proceeding is assigned is (571) 273-8300.

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PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Humera N. Sheikh

Huneral Duckle

Primary Examiner

Art Unit 1615

September 30, 2006

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